

# THE INTERPRETATION OF SEAT FACILITY'S FORM AND FUNCTION IN KARMAWIBHANGGA RELIEF OF BOROBUDUR TEMPLE

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**Abstract:** The paper entitled “The interpretation of seat facility’s form and function in Karmawibhangga Relief of Borobudur Temple” was the result of the 1<sup>st</sup> stage of Competitive Grant Research entitled “The Development of Javanese Furniture Form as the Attempt of Solidifying and Preserving Local Culture in Surakarta”. The problem raised was what are form and function of seat facilities in Karmawibhangga Relief of Borobudur Temple including: (1) the form seems visually to be: *bantalan* (pad), *amben kaki empat* (four-leg bed), *amben kaki enam* (six-leg bed), *amben kaki delapan* (eight-bed bed), chair, and recess or throne. (2) The size of seat can be seen based on the strips forming a wide high plane, the form manifested intended to sitting in group or individually, social status, and material. (3) The furniture material can be seen based on size thickness and working technique indicating the presence of wood and stone material. (4) The technique used to finish the seat and to create profile indicated the presence of chiseling and lathing techniques. The seating had physical, personal, and social functions. The physical function of seat was manifested into form according to activity. The personal function of seat was manifested into the consideration of what for it is produced (intention of production) based on the difference of social status as could be seen in the different forms and size. The social function of seat was manifested into various complicated (*ngrawit*) forms, sizes, ornaments, and profile; the form was manifested proportionally between ornament, size, and technique indicating the presence of intellectuality in high art taste proving the presence of civilization.

**Keywords:** relief, seat facility, form, function

## INTRODUCTION

Surakarta City is a cultural city with customary uniqueness still growing as former kingdom in the past. For the local development, industrial and tourism area is an important thing to consider. Surakarta has opportunity in industrial sector, particularly furniture area, because of its proximity to farm and plantation areas as the material, and to various cultural sites as the source of form inspiration. The presence of teak wood from Randu Blatung and Wonogiri, bamboo from Klaten and Sukoharjo, is the asset of natural resource deserving attention. Similarly, cultural site in the form of temples should be traced as the basis of furniture form development in Surakarta.

Considering the observation, in furniture business area in Surakarta, the problems to be solved are, among others: (a) poor ability of treating archipelago culture; (b) poor ability of understanding the market’s taste; (c) low utilization of designers; (d) poor

understanding on treating the development of material science. Those problems should be solved, for the furniture industry performers in Surakarta to improve their competitiveness and their sale volume for individual, local area, and to have cultural characteristic.

The presence of temples in Java lying close to Surakarta is an extraordinary wealth indicating the presence of civilization and contemporary culture. However, until today, generally even the world considers Indonesia as not having distinctive or typical Archipelago style-furniture or seat form yet. The artifact in the form of Borobudur temple implying the presence of sitting culture at that time should get attention to trace the Javanese sitting style that in turn becomes the basis of interpretation on seat style at that time to be developed in furniture form innovation in Surakarta.

Considering the background above, a research should be conducted to contribute to identifying the seat facility in Borobudur temple time as a historical series of the creation of Javanese community in Archipelago. The future or long-term expectation is that an innovative furniture form will be developed in Surakarta with uniqueness and Javanese characteristic originating from Borobudur temple, particularly in practical measure of understanding the creation of furniture design work with professional competitiveness, responsiveness to archipelago cultural richness, surrounding natural richness, and technology. To guide the discussion, the following problems should be formulated. (1) How is the interpretation of Borobudur temple's relief related to sitting culture and sitting position? (2) What are form, function, and meaning of seat originating from Borobudur temple's relief in the concept of Javanese culture?

Information on archipelago cultural richness related to sitting culture from several historical heritage artifacts can be observed, among others, including Borobudur temple. Pramono Atmadi, in his book entitled "Some Architectural Design Principles of Temples in Jawa" discussed a little about the use of wood and decoration in seat, but overall it emphasized more on the discussion about building or architectural aspect in Ancient Java period in Borobudur Temple (Pramono Atmadi, 1994: 33-48). In this work, Pramono Atmadi did not discuss at all the sitting culture, but information on architecture and the form of building was important to understand to conceive the existing spatial in the relief of Borobudur temple as the seat facility device. Inda Citra Ninda Noerhadi in her book entitled "*Busana Jawa Kuno*" pertained to sitting culture and seat (Noerhadi, 2012: 30, 71-72). Inda Citra Ninda Noerhadi's work should be understood to conceive the Javanese man activity despite the source coming from not only Borobudur Temple. Stutterheim, in his research, mentioned that there is a chair-shaped reliefs in Borobudur temple, exactly on Dewi Tara sculpture, and there is King Pradnya Pramita's chair-shaped relief in Singasari temple. Mendut and Plaosan Prambanan Temples indicate that sitting culture has been known since Ancient time (Gutsmi, 2000: 226). Stutterheim's work could prove the presence of sitting culture since ancient time including the one observed in Borobudur temple. Nevertheless, there is only Dewi Tara's seat in Borobudur temple and there is King Pradnya Pramita's chair-shaped relief in Singasari temple, so that further research should be conducted on sitting culture comprehensively. Haryani Santiko and Nugrahani wrote about *Karma*

Law Scene and Tenet on Karmawibhangga Relief. This work presents about the scene of entire panel that can be observed for sitting posture and seat visually, but does not address sitting culture and seat used (Santiko et al., 2012: passim). Considering several sources above, it could be stated that sitting culture and seat facility has been existing since Ancient time including Borobudur temple time but until today had not been studied comprehensively.

Currently, seat facility can be categorized into seat in the form of furniture. The observation on furniture is as same as that on structure of artistic object. Edmund Burke Feldman divides artistic work into three aspects: (1) *structure*; (2) *function*; and (3) *style* (Feldman, 1967: passim). Considering such the division of artistic work, the discussion of furniture from its structure aspect will borrow Frank Boas's concept, dividing the structure of an artistic work into three: (1) element, (2) composition and (3) arrangement (Boass, 1995: passim). Element, composition and arrangement can be found, thereby contextualized into its time condition. For that reason, Edmund's concept will be borrowed to be integrated into Ahimsa's stating that to understand artistic work is not merely to see object or text but also to see it contextually. Based on such the concept, the relief of temple can be analyzed to be interpreted in relation to sitting culture in its time as well as its activity-based function. The existing activity is traced based on the story translated into Karmawibhangga relief.

## METHODOLOGY

A study focusing on the attempt of interpreting the relief of Borobudur temple was conducted on Borobudur temple, Central Java. A study was conducted using hermeneutic approach. Schleiermacher understands hermeneutic as 'the art of understanding'. Furthermore, Dilthey explains that interpretation means not only finding what existing in an individual or object's mind, but also describing intellectual situation and social environment creating it (Nurul Huda in Sutrisno & Putranto, 2005: 210). Finding out its living experience through living history enclosing it, interpretation can be stated as complying with its objective. Therefore, the historical aspect is very important in Dilthey's hermeneutic. Adopting Heddy Shri Ahimsa's perspective, Putra explains that to analyze an art in artistic anthropology is to view the social-cultural context where the art grows and live textually and contextually (Heddy Shri Ahimsa Putra; 2004: 400). A textual study is dominated by hermeneutic (interpretative) paradigm while the contextual one by economic and political paradigm at that time. Recalling that the object of research is temple, it is interpreted in relation to sitting culture in line with the contemporary culture. The structure identified would be analyzed then to find the characteristic of form that can be developed as the source of superior furniture form development idea in Surakarta.

The data source included Artifact (Borobudur temple), Literature (journals, text books); informant considered as knowledgeable on the subject matter to be studied including archaeology, historicist, academician, and designer. Techniques of collecting data used were observation on artifact and content analysis, literature study and FGD. Data validation was carried out using source triangulation. It was conducted recalling

the potentially less consistent and reliable data collection. The model validation was conducted by cross-checking the information obtained from different sources, the one collected from document/archive source. The analysis process was conducted concurrently with data collection process from the beginning to the data collection considered as enough. The process of analyzing the information from literature/archive and interview data was carried out using an interactive model of analysis. The component of analysis included data collection, data reduction, display and conclusion drawing. The mechanism of analysis process was conducted continuously just like an inter-component interaction cycle until the information searched for actually complete (Miles and Huberman, 1984).

## **RESULT AND DISCUSSION**

Borobudur lies in Borobudur Sub District of Magelang Regency, exactly + 15 km to the south of Magelang city on Kedu land. Borobudur temple was built during the period of Samaratungga King from Syailendra Dynasty in 824. Borobudur consists of 1460 relief panels and 504 stupas (dome enclosing an effigy of Buddha).

The existence of Borobudur was found by local people in 18th century, reinvented by Sir Stanford Raffles in 1814. In 1885, an archeologist, JW Yzerman documented and recorded its relief. JW Yzerman's archeological team found the hidden relief on the bottom. Around 1890-1891, such the buried part was opened wholly by a photographer, Kasiyan Chepas, to be taken for its photograph in piecemeal. This 1300 m<sup>3</sup>-volume stone was lifted, and then returned into its original position (Santiko, 2012: 4-10). There are 3 panels in the south east par of temple opened presumably because of imperfect or unintentional reclosing process as an example that could be seen by the public about a glance of Kamadatu representation.

The result of Chepas' shot was then booked in 1931. This original book exists currently in National Museum, Jakarta. Meanwhile, the original film is stored in Tropen Museum, Amsterdam because its status belonging to Dutch Government. Indonesian Government has the replica of entire photograph. Borobudur temple stores information on contemporary culture reflected on its relief.

The relief of Borobudur temple's wall is divided into 5 (five) main stories: Karmawibhangga, Lalita wistara, Jataka, Awadana, and Gandawyuda. Karmawibhangga was the script representing the karma tenet, the causality of good and bad deeds. Good and bad deeds are the ones carried out in the world. The series of relief is not a serial story, but each of frames represents a story having causal relationship. The relief represents the man's disgraceful deed as well as the punishment he will get and the man's good deed with reward. Overall, it is the representation of man life in born-live-die (samsara) cycle named a never-ending chain. In Buddha, it is the chain that will be ended toward perfectness (Santiko, 2012: 25; Haryono and Pitana in FGD on July 2015).

The form of seat on Karmawibhangga relief is traced back through identifying the man behavior reflected on the relief of temple. Karmawibhangga relief represents the man's life as well as his environment. For that reason, the behavior existing is human



behavior with environment and between man and his fellow. Behavior is the man's daily attitude indicated with movement or activity (see Kartono, 1997: *passim*). Man behavior can usually be observed based on profession. A number of professions that can be identified through the panel of Karmawibhangga relief includes: farmer (0-65), sellers (0-1), musician (0-39), dancer (0-72), acrobat performer (0-52), street musician (0-117), traditional healer (0-18), executioner (0-4), traditional midwife (0-3), and servant (0-58). Considering the relief, many other professions are not represented explicitly, but their existence can be interpreted indirectly. The existence of potteries in the relief distributed in many panels, 0-66, indicates the presence of pottery making profession. The presence of dress and jewelries, interior element in the form of seat, wall, and roof indicates the professions undertaken by the people at that time. Nugrahani explains that a study on the inscription contemporary to Borobudur temple found not less than 100 types of profession (Nugraheni, in *Adegan dan Ajaran Hukum Karma pada Relief Karmawibhangga*, 2012: 21).

Such these professions are characterized with the activities or behavior undertaken including: spiritualist called so because its activities are teaching religion and knowledge from Holy Book as represented in panels 0-55 and 0-60, advising in panels 0-46, and exchanging ideas about religion in panels 0-49. The ruler or upper class is called so because its activities consisting of giving charity and alms. Charity and alms are given to the spiritualist in panels 0-12, to poor people in panel 0-32. Meanwhile common people is called so because it can be identified from its activity of receiving charity, harvesting plantation, being dedicated to bourgeois or spiritualist. The crop can be seen from the presence of banana (0-39), guava (0-62), mangosteen (0-61), mango (0-49), coconut (0-129), (Haryono and Pitana in FGD July, 2015).

In each of activities, the posture can be identified, particularly in relation to seat. Considering the sitting position and the seat used existing in 160 panels of Karmawibhangga, the following sitting posture and seat form can be formulated (see also the result of FGD on July, 2015, Haryono and Pitana).

1. Almost 100 percents of sitting posture is with leg and pelvic position on one flat support without leg hanging-down, but the position of leg is folded in various positions. Such the sitting posture is called *bersila*, *stimpuh*, *bersila santai*, and *bersila jegang*.



2. The seat appearing can be identified as consisting of following forms:

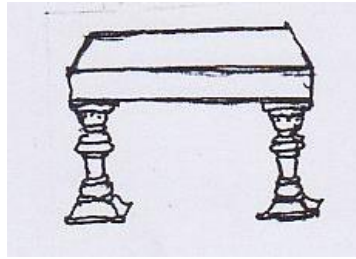
a. Pad

It is called so because it is box-shaped without pit as the sitting base. Some of this form consists of one object and some others consist of two mounted objects. These forms are currently identical with Sofa but without back. The form of pad consists of various sizes, particularly relative to height as a seat. The form of pad exists on panels 3, 4, 9, 10, 16, 21, 22, 23, 28, 30, 31, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 46, 47, 48, 49, 52, 53, 54, 55, 56, 57, 58, 59, 63, 64, 67, 68, 68, 70, 77, 78, 84, 87, 90, 92, 99, 104, 120, 121, 123, 130, 148, 153, 158, 159, 160. One of its examples can be seen in the figure below.



b. *Amben dengan empat kaki* (Four-leg bed with one leg in each of ends).

It is called *amben* because this tool consists of sheet as the seat, no back and no hand support, but it has leg in each of its ends, right and left. This form consists of various sizes particularly relative to seat width, leg height, and leg form. The form of *amben dengan kaki empat* (four-leg bed) exists on panels 2, 6, 7, 8, 9, 10, 11, 13, 14, 16, 17, 19, 27, 45, 55, 56, 64, 65, 66, 67, 75, 94, 95, 96, 97, 106, 108, 110, 112, 113, 116, 119, 125, 126, 127, 128, 131, 132, 133, 134, 137, 140, 143, 144, 146, 149, 150, 151, 152, 153, 153, 154, 156, 157. One of its examples can be seen in the figure below.



c. *Amben dengan enam kaki* (six-leg bed with leg in each of ends and the center)

It is called so because this object consists of consists of sheet as the seat, no back and no hand support, but it has leg in each of its ends, right, left and middle (center). This form consists of various sizes particularly relative to seat width, leg height, and leg form. The form of *amben dengan kaki enam* (six-leg bed) exists on panels 12, 16, 26, 40, 54, 103, 104, 112, 113, 133. One of its examples can be seen in the figure below.

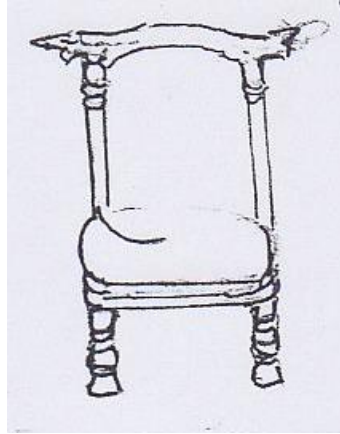


d. *Amben dengan delapan kaki* (eight-leg bed with four positions of leg on the right and left)

It is called so because this object consists of consists of sheet as the seat, no back and no hand support, but it has two legs respectively on the right and the left. This form consists of various sizes particularly relative to seat width, leg height, and leg form. The form of *amben dengan kaki delapan* (eight-leg bed) exists on panels 102, 115, 119, 122, 129, 145.

e. Chair

It is called chair because it is a four-leg seat with back. Two legs can be seen in the relief on the right and the left; this indicates that there is a leg parallel with the apparent one. The form of chair is varied, particularly in its ornament, height and back forms. The form of chair exists on panels 6, 7, 8, 29, 44, 58, 73, 79, 112. One of its examples can be seen in the figure below.



f. Throne or recess

It is called so because it is a seat with support on the back, right and left supporting a recess-shaped roof on it. Throne or recess has one-person, two-person or more than two-person shapes. The form (shape) of recess can be seen on panels 6, 7, 8, 11, 14, 15, 27, 30, 35, 37, 38, 42, 50, 64, 65, 66, 67, 69, 76, 80, 95, 96, 99, 100, 103, 104, 110, 112, 113, 115, 116, 117, 119, 122, 123, 124, 131, 132, 133, 1344, 136, 137, 138, 139, 140, 142, 143, 144, 146, 149, 150, 154, 156, 160. One of its examples can be seen in the figure below.



Regarding the size of seat, the seat's leg size can be identified thereby creating the pattern of an individual sitting on higher position and another sitting on the lower one. The sitting position is likely intended to distinguish the status of classes: spiritualist, bourgeois and common people. There are three classes of society during Borobudur temple time: spiritualist (priest, monk, ascetic), ruler (bourgeois, village head, *cakrawarin*, and land master), and common people with any professions.

The character with higher sitting position than others surrounding is identified as bourgeois, on panels 0-132. The common people behavior can be seen on panels 0-56 representing the people sitting on lower position with the posture of paying homage to the bourgeois sitting on upper position. The status of class is identified not only from sitting position but also from the presence or such facilities as umbrella and flower offerings and other postures, as Rafles explained:



The character sitting a throne-like seat with ornamented roof is usually flanked by other characters; the character sitting on throne without ornamented roof is accompanied or is being served; The characters standing flanking or serving are relatives or servants with high position; those sitting on *paseban*, facing a character are usually respecting or giving something; those sitting under the throne usually are the lower-status servants; those outside usually under the tree or in the forest represent the common people (Raffles in Noerhadi, Citraninda, Busana Jawa Kuno, Komunitas Bambu, 2012: 65).

The size of seat is identified based on the size of seat width followed with the seats provided consistent with the number of those present. Either pad or four-leg bed is intended to an individual or a group of individuals. Meanwhile six-leg and eight-leg beds are intended to a group of individuals (see Singleton: 1972, 45). It indicated the presence of a strong togetherness living concept at that time despite status social difference.

The size of seat can also be seen from the difference of frame thickness indicated with the horizontal hard lines with certain distance delivering an interpretation on the presence of different material and size used. The big-size or chubby seats are on average equipped with curving line and hollow presupposing a simple profile that can be identified as stone material. The presence of horizontal hard line creating a thin-size plane is followed with curving line and hollow as the ornamental line of more complicated profile and there is a frame junction with recess panel identified as wood material. The interpretation on the presence of wood and stone materials is correlated to other information constituting civilization related to the condition of 5<sup>th</sup>-8<sup>th</sup> century period. Borobudur was the time before Sukuh temple that has not recognized iron yet.

The form of profile in the relief can be interpreted as proving the presence of technique used at that time. Considering the profile form, there is a profile manifested into inlaying and lathing techniques. The complicated profile can be seen from the proportionality with other elements as the element of bed (*amben*) or chair or recess (*relung*) indicating the ability of taking the feeling of beauty into account proving the high artistic taste. The proof of present carving skill or wood profile is confirmed with the relief showing the roof form of saddle house, with crown roof, stage house with *Kuncungan*, *dangau*, *lumbung*, and *tratang* addition. In relation to the stone carving skill, it can be seen the relief representing the form of holy buildings (temple and stupa) (see Santiko, et al., 2012: 17-23)

The profile of bed leg, chair, and recess on the relief of Borobudur temple predictably established during the reign of Samaratungga King from Syailendra Dynasty in 800 AD proves that such the form was manifested first by the Archipelago ancestor than the chair-style form claimed as Western chair style developing in 20<sup>th</sup> century (See Sunarmi, 2005: 75; see also Pile: 1988, 123).

## CONCLUSION

Karmawibhangga relief represents the society life in its time. Karmawibhangga is the lowest part of Borobudur temple consisting of panels, called Kamadhatu. *Kamadhatu* represents the lower or desire world. In this world, human being is bond with desire even dominated by desire, willingness and passion. The relief existing on Kamadhatu on the original part of temple leg represents the man scenes in desire and willingness undertaken in the world. For that reason, it is called *Karmawibhangga*. *Karmawibhangga* relief depicts causal law for man deed in the world, the representation of man's disgraceful deed as well as its punishment and good deed as well as its reward. Overall, it is the representation of man life in born-live-die (*samsara*) cycle named a never-ending chain. In Buddha, it is the chain that will be ended toward perfectness.

The form, function and meaning of seat are interpreted through human behavior reflected on the relief of temple. Karmawibhangga relief represents human life with his environment, either man behavior to environment or the man behavior to his fellows. Behavior is the man's daily attitude indicated with movement or activity. A number of professions that can be identified through the panel of Karmawibhangga relief includes: farmer, sellers, musician, dancer, acrobat performer, street musician, traditional healer, executioner, traditional midwife, and servant. Considering the relief, many other professions are not represented explicitly, but their existence can be interpreted indirectly. The existence of potteries in the relief distributed in many panels indicates the presence of pottery making profession. The presence of dress and jewelries, interior element in the form of seat, wall, and roof indicates the professions undertaken by the people at that time.

The profession by social strata can be found in the activities undertaken including: spiritualist, bourgeois and common people classes. Spiritualist is called so because its activities are teaching religion and knowledge from Holy Book. The ruler or upper class is called so because its activities consisting of giving charity and alms. Meanwhile common people is called so because it can be identified from its activity of receiving charity, harvesting plantation, being dedicated to bourgeois or spiritualist.

The postures found in Karmawibhangga relief are: standing, sitting and squatting. Sitting posture can be seen in almost 100 percents of sitting posture with leg and pelvic position on one flat support without leg hanging-down, but the position of leg is folded in various positions. Such the sitting posture is called *bersila*, *stimpuh*, *bersila santai*, and *bersila jegang*. Largely, the form, function and meaning of seat/seat facilities on Karmawibhangga relief in Borobudur Temple can be explained as follows.

1. Pad, four-leg bed, six-leg bed, eight-leg bed, chair, and recess or throne. The form of seat patterns the sitting posture originating from crossed-leg sitting posture, serving as the personal reflection at that time, because the sitting posture was likely inspired with the sitting posture of Budha Gautama in his time.
2. The size of seat is manifested into the consideration of what for it is produced (intention of production), whether it is intended to individual or a group of individuals, social status, and material used reflected on the different seat width and

different seat leg height, seat frame or back thickness, and other element sizes proportionally.

3. The material used is reflected on the thickness of size and working technique indicating the presence of wood and stone materials.
4. The techniques used for finishing the material of profile are chiseling and lathing ones, particularly indicated in the seat leg, back support and recess.

Overall, the seating had physical, personal, and social functions. The physical function of seat was manifested into form according to activity. The personal function of seat was manifested into the consideration of what for it is produced (intention of production) based on the difference of social status as could be seen in the different forms and size. The social function of seat was manifested into various complicated (*ngrawit*) forms, sizes, ornaments, and profile; the form was manifested proportionally between ornament, size, and technique indicating the presence of intellectuality in high art taste proving the presence of civilization.

## REFERENCES

- Atmadi, Pramono. *Some Architectural Design Principles of Temples in Jawa*, (Yogyakarta: Gadjah Mada University Press, 1994).
- Boas, Franz. 1955. *Primitive Art*. New York: Dover Publication, Inc.
- Citrnida Noerhadi, Inda. *Busana Jawa Kuno*, cet-1, (Jakarta: Komunitas Bambu, 2012).
- Feldman, Edmund Burke. 1967. *Art AS Image and Idea*. New Jersey: Prentice Hall. Inc.
- Gustmi, SP. 2000. *Seni Kerajinan Mebel Ukir Jepara-Kajian Estetik Melalui Pendekatan Multidisiplin*. Yogyakarta: Kanisius.
- Kartono, Kartini. 1997. *Psikologi Umum*. Bandung: Mandar Maju.
- Norman K. Denzin & Yvonna S. Lincoln, ed., 1994. *Handbook of Qualitative Research*. London: Sage Publications, Inc.
- Pile, John F. 1988. *Interior Design* New York: Harry N. Abrams, Inc.
- Putra, Heddy Shri Ahimsa. 2000. *Ketika Orang Jawa Nyeni*. Yogyakarta: Galang Press dan Yayasan Adhikarya Universitas Gadjah Mada.
- Ricoeur, Paul. 2012. *Teori Interpretasi* (Ed. Musnur Hery). Yogyakarta : IRCiSoD.
- Sachari, Agus (ed), 2005. *Sejarah Desain*. Bandung: Kelompok Studi Desain-Jurusan Desain ITB.
- Santiko,dkk. 2012. *Adegan dan Ajaran Hukum Karma pada Relief Karmawibhangga*. Magelang: Balai Konservasi.
- Sutopo, H.B. 2002. *Metode Penelitian Kualitatif: Dasar Teori dan Terapannya dalam Penelitian* . Surakarta: UNS Press.
- Sutrisno, Mudji dan Hendar Putranto. 2005. *Teori-Teori Kebudayaan*. Yogyakarta : Kanisius.
- Singleton, 1972. *Introduction to Ergonomic* Geneva: World Held Organization.

- Stepat, Dorothy, et al., 1980. *Introduction to Interior Design*. New York: Macmillan Publishing Co., Inc.
- Sunarmi, 2005. *Interior Parcimayasa Karya Budaya Mangkuenegara VII*. Surakarta: UNS Press.
- Sunarmi dan R.M. Soedharsono. 2006. "Interior Pracimoyoso Karya Mangkunegara VII Di Pura Mangkunegaran Surakarta". Terakreditasi- Jurnal *Humanika*, ISSN: 1693-7414, Vol 19, No: 1.

